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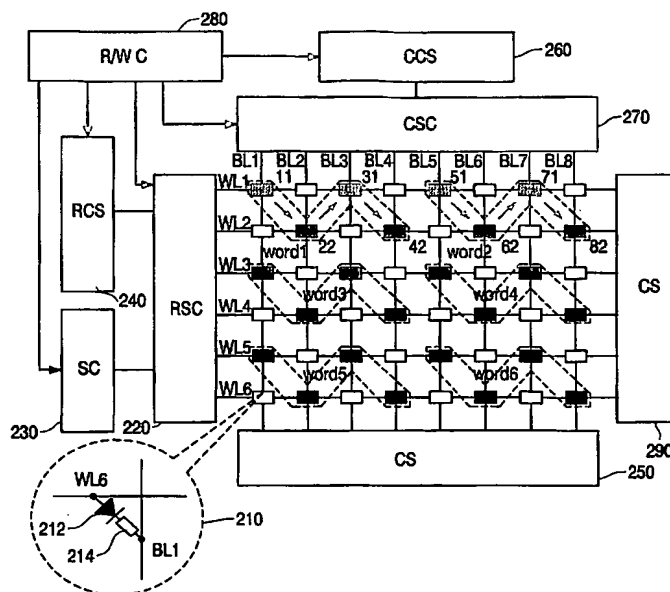
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[Continued on next page]

- (54) Title:** SIMULTANEOUS READING FROM AND WRITING TO DIFFERENT MEMORY CELLS



- (57) Abstract:** A nonvolatile memory array includes a grid of word lines WL1,...,WL6 and bit lines BL1,...,BL8. Of a plurality of memory cells 210, each memory cell is located at an intersection region of one of the word lines and one of the bit lines. A read/write circuit 280 for reading/writing a data word including a plurality of bits is operative to map each pair of sequential bits of the data word to a respective pair of memory cells located at intersection regions of both a different word line and a different bit line.



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